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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,013	02/01/2006	Jean-Emmanuel Berge	17102024001	9427
22511 7590 12/05/2008 OSHA LIANG L.L.P. TWO HOUSTON CENTER 909 FANNIN, SUITE 3500 HOUSTON, TX 77010				
EXAMINER				
BOES, TERENCE				
ART UNIT		PAPER NUMBER		
3656				
NOTIFICATION DATE		DELIVERY MODE		
12/05/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@oshaliang.com  
buta@oshaliang.com

**Office Action Summary****Application No.**

10/567,013

**Applicant(s)**

BERGE ET AL.

**Examiner**

TERENCE BOES

**Art Unit**

3656

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 21-28, 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiah US 5,929,588 in view of Cupp et al. US 4,127,911.

Shiah discloses:

- A gear (44)
- A multipolar magnetic ring (64)
- the magnetic ring is open (see hole through 64)

Shiah does not disclose a clipping mechanism.

Cupp et al. teaches clipping mechanism for the purpose of detachability (C1/L15-20, C2/L25-30).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Shiah and provide clipping mechanism, as taught by Cupp et al., for the purpose of detachability.

The clipping mechanism of Cupp et al. further comprises:

- at least, one stop element (25), which can engage with an anchor projection (43) with a coupling direction essentially parallel to the plane of the gear (the device is capable of this function),

- at least one retaining clip (34-36), which can engage, after elastic deformation, with a retaining projection (44), with a coupling direction essentially perpendicular to the plane of a gear (the device is capable of this function)
- each anchor projection (43) and each retaining projection (44) is fixed to a same side wall (42) and in that each retaining projection is positioned essentially opposite at least one anchor projection (43 is opposite 44)
- two anchor projections (any two of 43, 35, 46), each of which is respectively fixed to each of its free ends (flanges are free ends) and, on the other hand, a retaining projection (44 is equidistant from 45 and 46) positioned essentially at the same distances from said anchor projections
- each stop element (25) is able to exert an essentially axial pressure stress on the relevant anchor projection (the device is capable of this function), while each retaining clip (34-36) cooperates with the relevant retaining projection (34-36 cooperate with 44)
- each anchor projection comprises an axial bearing which is tilted downwards (see 47 in figure 4) .
- each stop element (25) comprises a concave axial bearing surface (see figure 4, walls 30 and 31 form a concave axial bearing surface),

and in that the axial bearing surface of each anchor projection (47 is flat as can be seen in figure 4) is essentially flat.

- the height of each anchor projection (47) is essentially lower than the height of the magnetic ring (the height of 43 is shown lower at the left side in figure 4), and in that said anchor projection is fixed to a bottom (42 is shown at the bottom of 12).
- the distal part of each anchor projection is beveled (see radii of 4 corners of 42 in figures 1 and 2)
- wherein each stop element (25) is made at the end of a recess (26, see figure 1) which can guide the engagement of the relevant anchor projection while the magnetic ring is tilted in relation to the plane of the gear (the device is capable of the claimed function)

Regarding functional language, the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations and therefore anticipates the claim. See MPEP 2114.

2. Claims 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiah US 5,929,588 in view of Cupp et al. US 4,127,911 as applied to claim 1 above, and further in view of Grass US 6,703,732.

Shiah in view of Cupp et al. discloses the claimed invention as discussed above. Shiah in view of Cupp et al. does not disclose a radial clamping element or a guiding lip. Grass teaches a radial clamping element (see portion of gear 14 radially outward of magnet 26 in figures 2-4) and a guiding lip (see portion of gear 14 radially inward of magnet 26 in figures 2-4). Because both Shiah in view of Cupp et al. and Grass teach attaching magnets to gears, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a radial clamping element and a guiding lip to achieve the predictable result of attaching magnet to a gear.

The clamping element of Grass further comprises:

- an elastically deformable outgrowth (the portion of gear 14 radially outward of magnet 26 in figures 2-4 is elastically deformable)

### ***Response to Arguments***

3. Applicant's arguments filed 09/11/2008 have been fully considered but they are not persuasive.

Applicant argues "Applicant respectfully asserts that the combination of Shiah and Cupp et al. does not show or suggest at least... wherein the at least one stop element and the at least one retaining clip immobilize the magnetic ring against the gear".

In response, Shiah discloses a multipolar magnetic ring (64) immobilized against a gear (44, see figure 4). Cupp et al. teaches clipping mechanism for the purpose of detachability (C1/L15-20, C2/L25-30). The clipping mechanism comprises a stop element (25) and a retaining clip (34-36).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERENCE BOES whose telephone number is (571)272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terence Boes/  
Examiner, Art Unit 3656

/Richard WL Ridley/  
Supervisory Patent Examiner, Art Unit 3656